CyberData Corporation

VoIP Intercom Configuration Guide

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Objectworld™

Tech Note

CyberData VoIP Intercom Configuration Guide

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Table of Contents

1 Introduction 4

1.1 Network Topology 4

2 Known Integration Issues 5

3 Preparation 6

3.1 PC Network Settings 6

3.2 CyberData VoIP Intercom Network Settings 6

3.3 Determining the IP Address of the Intercom 7

3.4 Firmware Upgrades 7

4 SIP Configuration 8

4.1 Gathering Information 8

4.2 Device Configuration 9

5 Auxiliary Relay Support 11

6 Troubleshooting 12

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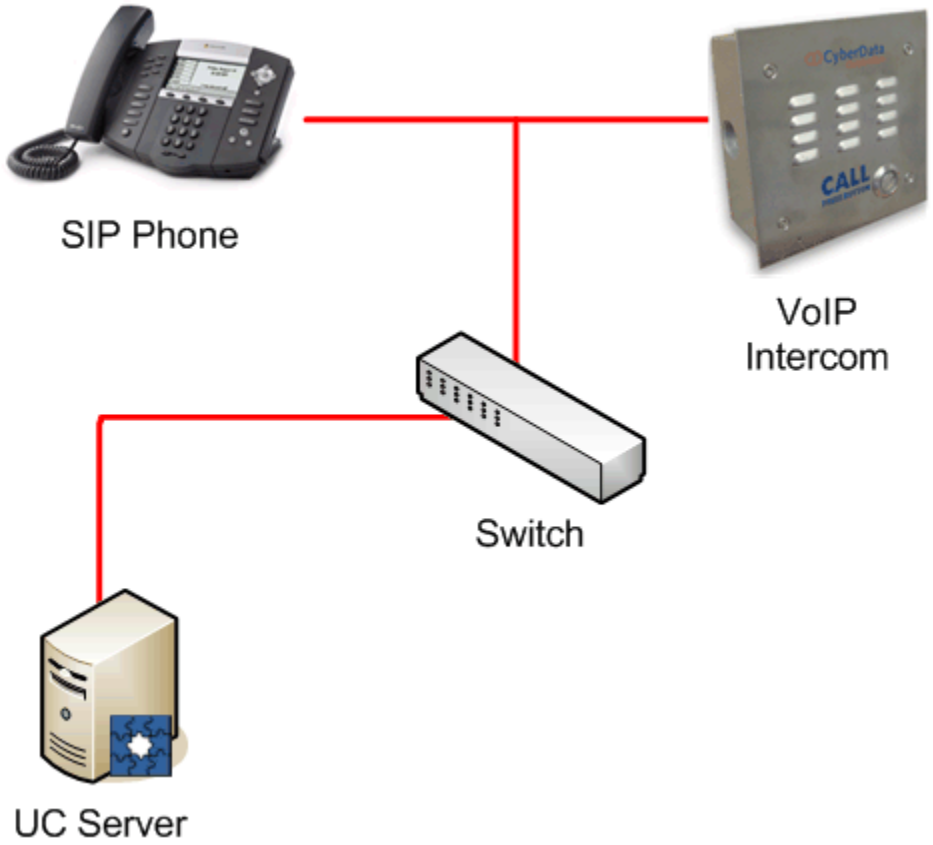
1 Introduction

The CyberData SIP-enabled VoIP Intercom is a door entry device that easily connects into existing local area networks (LANs) with a single cable connection. Its tamper-proof design allows the unit to be mounted securely and safely. The intercom also has a dry contact relay switch which allows you to unlock doors remotely.

1.1 Network Topology



This is the network topology for a single VoIP intercom configuration. In this configuration, the VoIP intercom acts as a standalone two-way SIP telephony device.

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2 Known Integration Issues

Known integration issues include:

- Cannot perform supervised transfers – Transferring a caller to the paging device does not work and results in the phone infinitely indicating a transfer without completing.

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3 Preparation

This section provides instructions for how to apply firmware updates (if necessary) and how to set up the device for manual configuration.

3.1 PC Network Settings

The factory default on CyberData products is a static IP address. To access the device, you must change your PC to the same subnet.

NOTE: Make a note of your original network settings before making any changes because you must change these settings back after changing the network configuration on the paging device.

To change the IP Address of your computer for Windows Server 2008/Windows Vista

1. Click Windows **Start**.
2. Click **Control Panel**.
3. If you have the classic view, click **Network and Sharing Center** and then click **Manage Network Connections**.
   If you have the category view, click **Network and Internet > View network status and tasks** and then **Manage Network Connections**.
4. Double-click the active **LAN or Internet connection**.
5. Click **Properties**.
6. In the **Networking** tab, highlight the **Internet Protocol (TCP/IP)** item, and click **Properties**.
7. In the **General** tab, click **Use the following IP address**, and enter:
   IP Address: 192.168.3.1
   Subnet Mask: 255.255.255.0
   Default Gateway: 192.168.3.10
8. Click **OK**.

To change the IP Address of your computer for Windows Server 2003/Windows XP

1. Click Windows **Start**.
2. Click **Control Panel**.
3. If you have the classic view, click **Network Connections**.
   If you have the category view, click **Network and Internet Connections**, and then click **Network Connections**.
4. Double-click your active **LAN or Internet connection**.
5. Click **Properties**.
6. In the **General** tab, highlight the **Internet Protocol (TCP/IP)** item, and click **Properties**.
7. In the **General** tab, click **Use the following IP address**, and enter:
   IP Address: 192.168.3.1
   Subnet Mask: 255.255.255.0
   Default Gateway: 192.168.3.10
8. Click **OK**.

3.2 CyberData VoIP Intercom Network Settings

The VoIP Intercom is configured with a static IP address on factory default. This must be changed so that the device is connected to your network.

To enter network settings for CyberData VoIP Paging Amplifier

1. Open your browser and type the IP Address of the intercom. The factory default is 192.168.3.10.
2. When prompted, use the following default Web Access username and password:
   - Web Access Username: ***admin***

- Web Access Password: ***admin***

3. Click **Network Setup**.
4. Under **IP Addressing,** select **DHCP**.
5. Click **Save Settings.**

3.3 Determining the IP Address of the Intercom

The paging device has an RTFM (Reset Test Function Management) switch that allows you to test or reset the device. This function also has the capability to announce the IP address. This is useful, for example, when you are using the paging device in a DHCP network configuration and need to know the IP address.

To determine the IP address of the paging device

1. Unplug the intercom.
2. Install the RTFM jumper.
3. Plug the network cable into the intercom to supply power to the intercom. The LED will illuminate during initialization, blink once, and then turn off.

   The Intercom will announce the IP Address.

CAUTION: If you install the RTFM jumper and press the call button for 10 seconds, the default factory settings will be restored

3.4 Firmware Upgrades

Refer to the Technical Note "TN051 – SIP Device Features and Comparisons" (a versioned document located on the Objectworld web site at www.objectworld.com/support/documentation) to determine the most recently supported version of firmware for the device.

3.4.1 Performing Firmware Upgrades

If you are running version 1.02 or below, you must download the most recent firmware version, which can be downloaded from the CyberData web site.

To perform the upgrade

1. Retrieve the latest firmware from the CyberData website. (http://www.cyberdata.net/support/voip/intercom.html)
2. Unzip the file to the Objectworld TFTP folder (located in: ***X*:\Program Files\Objectworld\UC Server\Data\TFTP** where ***X*** is the drive where the UC Server program files are installed)
3. Open your browser and type the IP Address of the paging device.
4. When prompted, use the following default Web Access username and password:
   Web Access Username: ***admin***
   Web Access Password: ***admin***
5. Click the **Upgrade Firmware** button.
6. Enter the IP address of your UC Server in the TFTP **Server IP** field.
7. Under New Filename, enter the filename of the firmware image that you unzipped from the firmware zip file. For example: **103-uImage-intercom**
8. Click **Upload File.**

4 SIP Configuration

4.1 Gathering Information

To configure the device, you need the following information.

SIP User ID: This is equivalent to the identity address that you want to associate with the device.

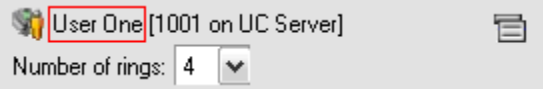
Authenticate ID: This is the SIP authentication identifier associated with the above identity. This is required by any SIP end-point to register with the SIP PBX.

Authenticate Password: This is the SIP authentication password associated with the above identity.

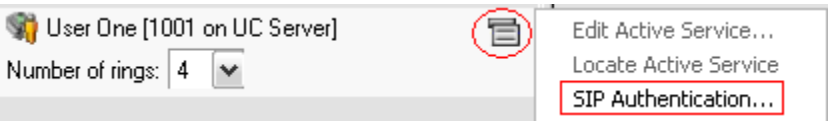
4.1.1 Determining the Authentication ID and Password as the user (that owns the identity) in UC Client

To determine the Authentication ID and Password

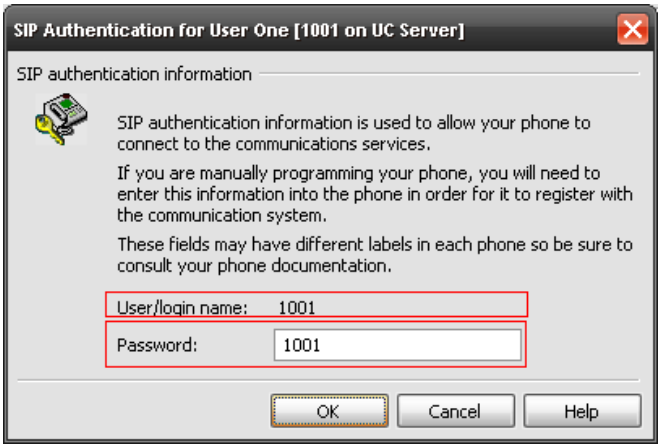
1. Start UC Client.
2. Login as the user you want to associate to the device.
3. In the bottom left pane, take note of the identity name.



4. Click the icon on the right and select **SIP Authentication**.



5. Record the User/login name and password from the following dialog because you will need it later to configure the device.

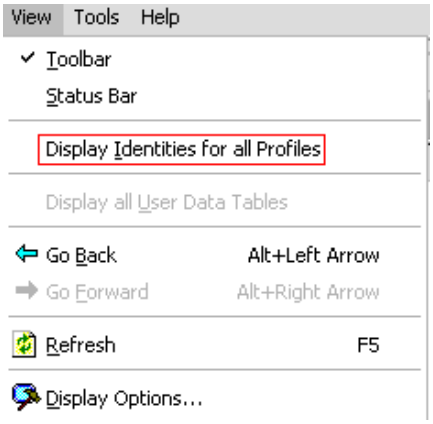

SIP Authentication for User One [1001 on UC Server]
SIP authentication information
SIP authentication information is used to allow your phone to connect to the communications services.
If you are manually programming your phone, you will need to enter this information into the phone in order for it to register with the communication system.
These fields may have different labels in each phone so be sure to consult your phone documentation.
User/login name: 1001
Password: 1001
OK
Cancel
Help

4.1.2 Determining the Authentication ID and Password as the administrator in UC Client

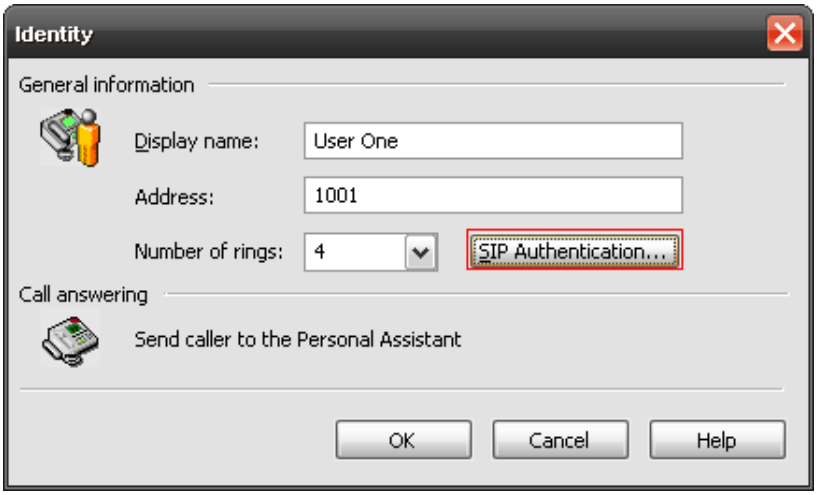
To determine the Authentication ID and Password

1. Start UC Client.
2. Login as the admin user.
3. Select the **Identities** tab in the left pane.

4. Go to **View > Display Identities for all Profiles**.



5. Find the identity in the list that you want to use and double-click the entry.
6. Click **SIP Authentication**.



7. Record the User/login name and password from the following dialog because you will need it later to configure the device.

SIP Authentication for User One [1001 on UC Server]
SIP authentication information
SIP authentication information is used to allow your phone to connect to the communications services.
If you are manually programming your phone, you will need to enter this information into the phone in order for it to register with the communication system.
These fields may have different labels in each phone so be sure to consult your phone documentation.
User/login name: 1001
Password: 1001
OK
Cancel
Help

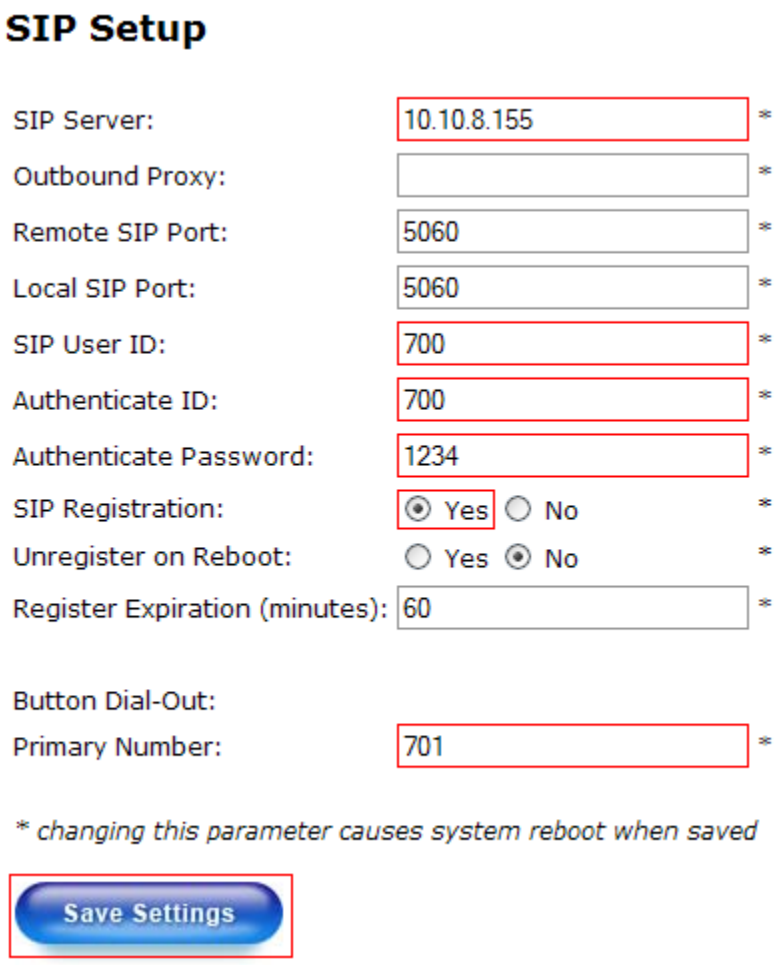
4.2 Device Configuration

1. Open your browser and type the IP Address of the paging device.
2. When prompted, use the following default Web Access username and password:

Web Access Username: ***admin***
Web Access Password: ***admin***

1. Click the **SIP Setup** button.
2. Enter the following information:
   SIP Server: <IP Address of UC Server>
   SIP User ID: <SIP User ID>
   SIP Authenticate ID: <SIP User ID>
   SIP Password: <Authenticate Password>
   SIP Registration: Yes
   Primary number: Enter the extension of the person that is to be called. This is the extension that is dialed when a user presses the intercom button.
3. Click **Save Settings**.

The figure below shows an example of how to complete the required fields.

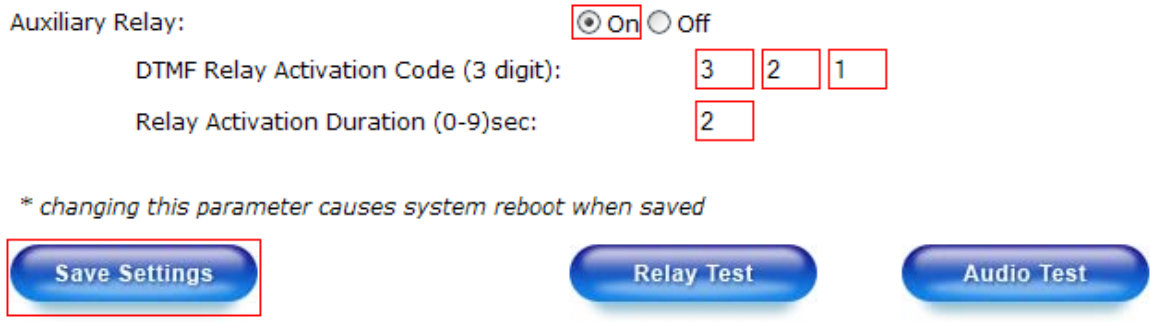

SIP Setup
SIP Server: 10.10.8.155 *
Outbound Proxy: *
Remote SIP Port: 5060 *
Local SIP Port: 5060 *
SIP User ID: 700 *
Authenticate ID: 700 *
Authenticate Password: 1234 *
SIP Registration: Yes No *
Unregister on Reboot: Yes No *
Register Expiration (minutes): 60 *
Button Dial-Out:
Primary Number: 701 *
* changing this parameter causes system reboot when saved
Save Settings

5 Auxiliary Relay Support

The CyberData VoIP Intercom has a built-in relay for devices such as a door lock mechanism to allow remote entry via the intercom. For information on the requirements and installation instructions for setting up the relay, see **the CyberData Quick Reference guide**.

To configure the relay from the web interface

1. Open your browser and type the IP Address of the paging device.
2. When prompted, use the following default Web Access username and password:
   Web Access Username: ***admin***
   Web Access Password: ***admin***
3. Click the **Intercom Setup** button.
4. Enter the following information:
   Auxiliary Relay: On
   DTMF Relay Activation Code: Enter 3 digits that will be used to activate the relay.
   Relay Activation Duration: Enter the relay activation duration.
5. Click **Save Settings**.



6 Troubleshooting

1. **You receive a voicemail prompt when dialing the identity of the device.**

   Verify the following:
   - The identity was created in UC Server and the correct User ID and password are configured on the device
     - See section 4
   - The SIP Server address on the device is set to the correct IP Address of UC Server
     - See section 4.2
   - SIP Registration is enabled on the device
     - See section 4.2

2. **You are unable to access the Web interface to configure the paging device.**

   Verify the following:
   - Your PC is set to the same address range as the device for first-time configuration.
     - See section 3.2

3. **No audio when calling into paging device.**

   Verify the following:
   - The volume level is set correctly
     - This can be adjusted by logging in to the web interface under intercom setup

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